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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,649	07/31/2001	Mark J. Feldstein	79,856	1077

7590 10/07/2005

Naval Research Laboratory, Code 1008.2
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EXAMINER	
LUDLOW, JAN M	

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/917,649	FELDSTEIN, MARK J.	
	Examiner	Art Unit	
	Jan M. Ludlow	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29 and 47-67* is/are pending in the application.

4a) Of the above claim(s) *48-55,58-60 and 63* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29,47,56,57,61,62 and 64-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's election with traverse of group IA in the reply filed on July 14, 2005 is acknowledged. The traversal is on the ground(s) that the species are not mutually exclusive and there is no burden in searching the multiple species. This is not found persuasive because applicant has not pointed to any features in the species that are not exclusive to the species, and there is significant burden in electronic searching for the multiple different features of the multiple species, e.g., inputting additional search terms and evaluating additional references for different issues of patentability.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 29, 47, 56-57, 61-62, 64-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 29 and 64, "only when at least the negative pressure source is activated and when the respective reservoir is unsealed..." does not find support in the application as filed. The specification states that "fluid does not flow into the primary channel unless both the negative pressure source is activated and at least one reservoir is unsealed" (p. 8, lines 24-28). This language is found in claim 62. What does "only when at least the negative pressure source is activated and when the respective reservoir is unsealed..." mean that is not meant by the language of claim 62, and where is this found in the disclosure as filed?

3. Claims 29, 47, 56-57, 61-62, 64-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 29, 64, it is not clear what "at least the negative pressure source is activated" means in relation to the disclosure—what else might be activated? In claims 56-57, there is no structural relationship between the elements of claims 56-57 and those of claim 29. In claim 57, it is unclear whether the plurality of waveguides is the same or in addition to that of claim 56. In claims 65-67, it is unclear what structural limitations are intended—is a detector (claim 65) coupled to the primary channel (claim 66) intended? How does the identity of the first and second fluids, which are not positively recited elements of the invention, limit the structure of the apparatus?

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 29, 47, 61, 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Kluttz (2002/0127708).

Kluttz teaches an apparatus for processing test strips for optical analysis [0076]. Figure 46 shows a primary channel between 710 and 708, enclosed first and second reservoirs 134 with adjustable vents EV2, negative pressure 704 and analytical device 706. Alternatively, the optical analyzer taught [0076] is "associated" with the primary channel in that it may be used in conjunction with the device having the primary channel. With respect to the functional limitations beginning "wherein..." in claim 29, and the functional limitation of claim 62, the device is structurally capable of the intended use.

8. Claims 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kluttz as applied to claim 29 above, and further in view of Pilevar (6558958).

Kluttz fails to teach that the optical sensor is a waveguide sensor.

Pilevar teaches a waveguide sensor for assays performed in gas, liquid or solid environments (col. 1, lines 18-19), including detecting nucleic acid hybridization (col. 1, lines 35-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a waveguide sensor as the optical detector in the apparatus of Kluttz in order to detect hybridization as taught by Pilevar.

9. Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jan M. Ludlow
Primary Examiner
Art Unit 1743

Jml
October 3, 2005